

UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA

3M COMPANY and
3M INNOVATIVE PROPERTIES COMPANY

Civil Action 10-cv-2630 MJD/FLN

Plaintiffs,

v.

JURY TRIAL DEMANDED

AVERY DENNISON CORPORATION,

Defendant.

**DEFENDANT'S ANSWER, AFFIRMATIVE DEFENSES AND
COUNTERCLAIMS TO PLAINTIFFS' AMENDED COMPLAINT FOR PATENT
INFRINGEMENT**

Defendant Avery Dennison Corporation ("Avery" or "Defendant") answers the Amended Complaint of plaintiffs 3M Innovative Properties Company and 3M Company (collectively "3M" or "Plaintiffs") and counterclaims as follows. All averments and allegations not expressly admitted herein are denied. The paragraph numbers correspond to those in 3M's Amended Complaint.

NATURE AND BASIS OF ACTION

1. Avery admits that 3M sells a retroreflective sheeting product known as Diamond Grade DG3. Avery denies any remaining allegations in paragraph 1 of the Amended Complaint.

2. Avery admits the Amended Complaint purports to set forth an action for patent infringement arising under the patent laws and that 3M seeks monetary and injunctive relief.

THE PARTIES

3. Admitted.

4. Admitted.

5. Admitted.

JURISDICTION AND VENUE

6. Avery admits that this Court has subject matter jurisdiction over Plaintiffs' Amended Complaint.

7. Denied.

8. Avery admits it is subject to personal jurisdiction in the State of Minnesota but otherwise denies the allegations.

PLAINTIFFS' PATENTS-IN-SUIT

U.S. Patent No. 5,706,132

9. Avery admits that United States Patent No. 5,706,132 ("the '132 Patent") is entitled "Dual Orientation Retroreflective Sheeting," that it was issued to Susan K. Nestegard, Gerald M. Benson, Cheryl Frey, John C. Kelliher, James E. Lasch, Kenneth L. Smith, and Theodore J. Szczech, and that a copy of the '132 Patent was attached to the Amended Complaint as Exhibit A. Avery otherwise denies the allegations of this paragraph.

10. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 10 of the Amended Complaint and on that basis denies these allegations.

11. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 11 of the Amended Complaint and on that basis denies these allegations.

12. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 12 of the Amended Complaint and on that basis denies these allegations.

13. Avery admits the '132 Patent contains forty-five claims that appear to cover retroreflective sheeting.

14. Paragraph 14 states a legal conclusion for which no response is necessary and on that basis Avery denies.

U.S. Patent No. 5,936,770

15. Avery admits that United States Patent No. 5,936,770 ("the '770 Patent") is entitled "Dual Orientation Retroreflective Sheetng," that it was issued to Susan K. Nestegard, Gerald M. Benson, Cheryl M. Frey, John C. Kelliher, James E. Lasch, Kenneth L. Smith, and Theodore J. Szczech, and that a copy of the '770 Patent was attached to the Amended Complaint as Exhibit B. Avery otherwise denies the allegations of this paragraph.

16. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 16 of the Amended Complaint and on that basis denies these allegations.

17. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 17 of the Amended Complaint and on that basis denies these allegations.

18. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 18 of the Amended Complaint and on that basis denies these allegations.

19. Avery admits the '770 Patent contains forty-eight claims that appear to cover retroreflective sheeting.

20. Paragraph 20 states a legal conclusion for which no response is necessary and on that basis Avery denies.

U.S. Patent No. 6,884,371

21. Avery admits that United States Patent No. 6,884,371 ("the '371 Patent") is entitled "Method of Making Retroreflective Sheetings And Articles," that it was issued to Kenneth L. Smith, and that a copy of the '371 Patent was attached to the Amended Complaint as Exhibit C. Avery otherwise denies the allegations of this paragraph.

22. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 22 of the Amended Complaint and on that basis denies these allegations.

23. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 23 of the Amended Complaint and on that basis denies these allegations.

24. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 24 of the Amended Complaint and on that basis denies these allegations.

25. Avery admits the '371 Patent contains sixteen claims that appear to cover methods of making retroreflective sheeting.

26. Paragraph 26 states a legal conclusion for which no response is necessary and on that basis Avery denies.

U.S. Patent No. 7,188,960

27. Avery admits that United States Patent No. 7,188,960 ("the '960 Patent") is entitled "Retroreflective Sheeting Having High Retroreflectance At Low Observation Angles," that it was issued to Kenneth L. Smith, and that a copy of the '960 Patent was attached to the Amended Complaint as Exhibit D. Avery otherwise denies the allegations of this paragraph.

28. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 28 of the Amended Complaint and on that basis denies these allegations.

29. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 29 of the Amended Complaint and on that basis denies these allegations.

30. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 30 of the Amended Complaint and on that basis denies these allegations.

31. Avery admits the '960 Patent contains seventeen claims that appear to cover retroreflective sheeting.

32. Paragraph 32 states a legal conclusion for which no response is necessary and on that basis Avery denies.

U.S. Patent No. 7,261,426

33. Avery admits that United States Patent No. 7,261,426 ("the '426 Patent") is entitled "Lamina Comprising Cube Corner Elements And Retroreflective Sheetings," that it was issued to Kenneth L. Smith, and that a copy of the '426 Patent was attached to the Amended Complaint as Exhibit E. Avery otherwise denies the allegations of this paragraph.

34. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 34 of the Amended Complaint and on that basis denies these allegations.

35. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 35 of the Amended Complaint and on that basis denies these allegations.

36. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 36 of the Amended Complaint and on that basis denies these allegations.

37. Avery admits the '426 patent contains fourteen claims that appear to cover articles comprising preferred geometry cube corner elements.

38. Paragraph 38 states a legal conclusion for which no response is necessary and on that basis Avery denies.

U.S. Patent No. 7,329,012

39. Avery admits that United States Patent No. 7,329,012 ("the '012 Patent") is entitled "Lamina Comprising Cube Corner Elements And Retroreflective Sheeting," that it was issued to Kenneth L. Smith, and that a copy of the '426 Patent was attached to the Amended Complaint as Exhibit F. Avery otherwise denies the allegations of this paragraph.

40. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 40 of the Amended Complaint and on that basis denies these allegations.

41. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 41 of the Amended Complaint and on that basis denies these allegations.

42. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 42 of the Amended Complaint and on that basis denies these allegations.

43. Avery admits the '012 Patent contains nine claims that appear to cover retroreflective sheeting.

44. Paragraph 44 states a legal conclusion for which no response is necessary and on that basis Avery denies.

U.S. Patent No. 7,458,694

45. Avery admits that United States Patent No. 7,458,694 ("the '694 Patent") is entitled "Method of Making Retroreflective Sheeting And Articles," that it was issued to Kenneth L. Smith, and that a copy of the '694 Patent was attached to the Amended Complaint as Exhibit G. Avery otherwise denies the allegations of this paragraph.

46. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 46 of the Amended Complaint and on that basis denies these allegations.

47. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 47 of the Amended Complaint and on that basis denies these allegations.

48. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 48 of the Amended Complaint and on that basis denies these allegations.

49. Avery admits the '694 Patent contains sixteen claims that appear to cover methods of making retroreflective sheeting.

50. Paragraph 50 states a legal conclusion for which no response is necessary and on that basis Avery denies.

U.S. Patent No. 7,556,386

51. Avery admits that United States Patent No. 7,556,386 ("the '386 Patent") is entitled "Lamina Comprising Cube Corner Elements And Retroreflective Sheeting," that it was issued to Kenneth L. Smith, and that a copy of the '386 Patent was attached to the Amended Complaint as Exhibit H. Avery otherwise denies the allegations of this paragraph.

52. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 52 of the Amended Complaint and on that basis denies these allegations.

53. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 53 of the Amended Complaint and on that basis denies these allegations.

54. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 54 of the Amended Complaint and on that basis denies these allegations.

55. Avery admits the '386 patent contains twenty-nine claims that appear to cover retroreflective sheeting.

56. Paragraph 56 states a legal conclusion for which no response is necessary and on that basis Avery denies.

U.S. Patent No. 6,318,987

57. Avery admits that United States Patent No. 6,318,987 ("the '987 Patent") is entitled "Cube Corner Sheeting Mold And Method Of Making The Same," that it was

issued to Dan E. Luttrell, Robert L. Erwin, Kenneth L. Smith, and Gerald M. Benson, and that a copy of the '987 Patent was attached to the Amended Complaint as Exhibit I.

Avery otherwise denies the allegations of this paragraph.

58. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 58 of the Amended Complaint and on that basis denies these allegations.

59. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 59 of the Amended Complaint and on that basis denies these allegations.

60. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 60 of the Amended Complaint and on that basis denies these allegations.

61. Avery admits the '987 Patent contains sixty-four claims that appear to cover laminae.

62. Paragraph 62 states a legal conclusion for which no response is necessary and on that basis Avery denies.

U.S. Patent No. 6,257,860

63. Avery admits that United States Patent No. 6,257,860 ("the '860 Patent") is entitled "Cube Corner Sheeting Mold And Method Of Making The Same," that it was issued to Dan E. Luttrell, Robert L. Erwin, Kenneth L. Smith, and Gerald M. Benson, and that a copy of the '860 Patent was attached to the Amended Complaint as Exhibit J. Avery otherwise denies the allegations of this paragraph.

64. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 64 of the Amended Complaint and on that basis denies these allegations.

65. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 65 of the Amended Complaint and on that basis denies these allegations.

66. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 66 of the Amended Complaint and on that basis denies these allegations.

67. Avery admits the '860 Patent contains twenty-seven claims generally directed to laminae.

68. Paragraph 68 states a legal conclusion for which no response is necessary and on that basis Avery denies.

U.S. Patent No. 6,386,855

69. Avery admits that United States Patent No. 6,386,855 ("the '855 Patent") is entitled "Cube Corner Sheeting Mold And Of Making The Same," that it was issued to Dan E. Luttrell, Robert L. Erwin, Kenneth L. Smith, and Gerald M. Benson, and that a copy of the '855 Patent was attached to the Amended Complaint as Exhibit K. Avery otherwise denies the allegations of this paragraph.

70. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 70 of the Amended Complaint and on that basis denies these allegations.

71. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 71 of the Amended Complaint and on that basis denies these allegations.

72. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 72 of the Amended Complaint and on that basis denies these allegations.

73. Avery admits the '855 Patent contains twelve claims that appear to cover laminae.

74. Paragraph 74 states a legal conclusion for which no response is necessary and on that basis Avery denies.

U.S. Patent No. 7,309,135

75. Avery admits that United States Patent No. 7,309,135 ("the '135 Patent") is entitled "Method Of Making Retroreflective Sheeting And Articles," that it was issued to Kenneth L. Smith, and that a copy of the '135 Patent was attached to the Amended Complaint as Exhibit L. Avery otherwise denies the allegations of this paragraph.

76. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 76 of the Amended Complaint and on that basis denies these allegations.

77. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 77 of the Amended Complaint and on that basis denies these allegations.

78. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 78 of the Amended Complaint and on that basis denies these allegations.

79. Avery admits the '135 Patent contains nine claims that appear to cover retroreflective sheeting.

80. Paragraph 80 states a legal conclusion for which no response is necessary and on that basis Avery denies.

U.S. Patent No. 7,152,983

81. Avery admits that United States Patent No. 7,152,983 ("the '983 Patent") is entitled "Lamina Comprising Cube Corner Elements And Retroreflective Sheetng," that it was issued to Kenneth L. Smith, and that a copy of the '983 Patent was attached to the Amended Complaint as Exhibit M. Avery otherwise denies the allegations of this paragraph.

82. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 82 of the Amended Complaint and on that basis denies these allegations.

83. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 83 of the Amended Complaint and on that basis denies these allegations.

84. Avery lacks knowledge or information sufficient to form a belief as to the truth of any allegations in paragraph 84 of the Amended Complaint and on that basis denies these allegations.

85. Avery admits the '983 Patent contains twenty-eight claims that appear to cover laminae.

86. Paragraph 86 states a legal conclusion for which no response is necessary and on that basis Avery denies.

DEFENDANT'S INFRINGING ACTIVITIES

87. Avery admits it makes the OmniCube T-11500 Prismatic Reflective Film in the United States. Avery otherwise denies the allegations of this paragraph.

88. Avery admits it makes the OmniCube T-11500 Prismatic Reflective Film in the United States. Avery otherwise denies the allegations of this paragraph.

89. Avery admits it makes the OmniCube T-11500 Prismatic Reflective Film in the United States. Avery otherwise denies the allegations of this paragraph.

90. Avery admits it makes the OmniCube T-11500 Prismatic Reflective Film in the United States. Avery otherwise denies the allegations of this paragraph.

91. Avery admits it makes the OmniCube T-11500 Prismatic Reflective Film in the United States. Avery otherwise denies the allegations of this paragraph.

92. Avery admits it makes the OmniCube T-11500 Prismatic Reflective Film in the United States. Avery otherwise denies the allegations of this paragraph.

93. Avery admits it makes the OmniCube T-11500 Prismatic Reflective Film in the United States. Avery otherwise denies the allegations of this paragraph.

94. Avery admits it makes the OmniCube T-11500 Prismatic Reflective Film in the United States. Avery otherwise denies the allegations of this paragraph.

95. Avery admits it makes the OmniCube T-11500 Prismatic Reflective Film in the United States. Avery otherwise denies the allegations of this paragraph.

96. Avery admits it makes the OmniCube T-11500 Prismatic Reflective Film in the United States. Avery otherwise denies the allegations of this paragraph.

97. Avery admits it makes the OmniCube T-11500 Prismatic Reflective Film in the United States. Avery otherwise denies the allegations of this paragraph.

98. Avery admits it makes the OmniCube T-11500 Prismatic Reflective Film in the United States. Avery otherwise denies the allegations of this paragraph.

99. Avery admits it makes the OmniCube T-11500 Prismatic Reflective Film in the United States. Avery otherwise denies the allegations of this paragraph.

100. Avery admits that it knew about some the patents-in-suit prior to the amended complaint being filed.

COUNT ONE
AVERY'S INFRINGEMENT OF THE '132 PATENT

101. As to paragraph 101 of the Amended Complaint, Avery reasserts and incorporates its responses to paragraphs 1 through 100 above.

102. Denied.

103. Denied.

104. Denied.

105. Denied.

106. Denied.

107. Denied.

COUNT TWO
avery's infringement of the '770 patent

108. As to paragraph 108 of the Amended Complaint, Avery reasserts and incorporates its responses to paragraphs 1 through 107 above.

109. Denied.

110. Denied.

111. Denied.

112. Denied.

113. Denied.

114. Denied.

COUNT THREE
avery's infringement of the '371 patent

115. As to paragraph 115 of the Amended Complaint, Avery reasserts and incorporates its responses to paragraphs 1 through 114 above.

116. Denied.

117. Denied.

118. Denied.

119. Denied.

120. Denied.

121. Denied.

COUNT FOUR
AVERY'S INFRINGEMENT OF THE '960 PATENT

122. As to paragraph 122 of the Amended Complaint, Avery reasserts and incorporates its responses to paragraphs 1 through 121 above.

123. Denied.

124. Denied.

125. Denied.

126. Denied.

127. Denied.

128. Denied.

COUNT FIVE
AVERY'S INFRINGEMENT OF THE '426 PATENT

129. As to paragraph 129 of the Amended Complaint, Avery reasserts and incorporates its responses to paragraphs 1 through 128 above.

130. Denied.

131. Denied.

132. Denied.

133. Denied.

134. Denied.

135. Denied.

COUNT SIX
AVERY'S INFRINGEMENT OF THE '012 PATENT

136. As to paragraph 136 of the Amended Complaint, Avery reasserts and incorporates its responses to paragraphs 1 through 135 above.

137. Denied.

138. Denied.

139. Denied.

140. Denied.

141. Denied.

142. Denied.

COUNT SEVEN
AVERY'S INFRINGEMENT OF THE '694 PATENT

143. As to paragraph 143 of the Amended Complaint, Avery reasserts and incorporates its responses to paragraphs 1 through 142 above.

144. Denied.

145. Denied.

146. Denied.

147. Denied.

148. Denied.

149. Denied.

COUNT EIGHT
AVERY'S INFRINGEMENT OF THE '386 PATENT

150. As to paragraph 150 of the Amended Complaint, Avery reasserts and incorporates its responses to paragraphs 1 through 149 above.

151. Denied.

152. Denied.

153. Denied.

154. Denied.

155. Denied.

156. Denied.

COUNT NINE
AVERY'S INFRINGEMENT OF THE '987 PATENT

157. As to paragraph 157 of the Amended Complaint, Avery reasserts and incorporates its responses to paragraphs 1 through 156 above.

158. Denied.

159. Denied.

160. Denied.

161. Denied.

162. Denied.

163. Denied.

COUNT TEN
avery's infringement of the '860 patent

164. As to paragraph 164 of the Amended Complaint, Avery reasserts and incorporates its responses to paragraphs 1 through 163 above.

165. Denied.

166. Denied.

167. Denied.

168. Denied.

169. Denied.

170. Denied.

COUNT ELEVEN
avery's infringement of the '855 patent

171. As to paragraph 171 of the Amended Complaint, Avery reasserts and incorporates its responses to paragraphs 1 through 170 above.

172. Denied.

173. Denied.

174. Denied.

175. Denied.

176. Denied.

177. Denied.

COUNT TWELVE
AVERY'S INFRINGEMENT OF THE '135 PATENT

178. As to paragraph 178 of the Amended Complaint, Avery reasserts and incorporates its responses to paragraphs 1 through 177 above.

179. Denied.

180. Denied.

181. Denied.

182. Denied.

183. Denied.

184. Denied.

COUNT THIRTEEN
AVERY'S INFRINGEMENT OF THE '983 PATENT

185. As to paragraph 185 of the Amended Complaint, Avery reasserts and incorporates its responses to paragraphs 1 through 184 above.

186. Denied.

187. Denied.

188. Denied.

189. Denied.

190. Denied.

191. Denied.

PRAYER FOR RELIEF

Avery denies that Plaintiffs are entitled to judgment or relief as set forth on pages 26 through 27 of the Amended Complaint.

AFFIRMATIVE DEFENSES

Without assuming the burden of proof which would otherwise reside with Plaintiffs, Avery asserts its affirmative defenses as follows:

FIRST AFFIRMATIVE DEFENSE: NON-INFRINGEMENT OF THE PATENTS-IN-SUIT

192. Avery has not infringed and is not infringing any valid and enforceable claim of the '132, '770, '371, '960, '426, '012, '694, '386, '987, '860, '855, '135, or '983 Patents.

SECOND AFFIRMATIVE DEFENSE: INVALIDITY OF THE PATENTS-IN-SUIT

193. On information and belief, the '132, '770, '371, '960, '426, '012, '694, '386, '987, '860, '855, '135, and '983 Patents and their claims are invalid for failure to satisfy one or more conditions of patentability set forth in Title 35 of the United States Code, including, but not limited to, 35 U.S.C. § 101, 102, 103 and 112.

THIRD AFFIRMATIVE DEFENSE: INEQUITABLE CONDUCT

'426, '386 and '135 Patents

194. 3M and/or its agents who were materially involved in the prosecution of patents failed to fulfill the duty of candor owed to the patent office during the prosecution of the '426, '386 and '135 Patents.

195. The '426, '386 and '135 Patents that 3M has asserted against Avery contain claims that are directed to varying dihedral 1-2 and 1-3 angles in opposition to one another. Kenneth Smith claims to have invented this concept. Yet Smith, who is named as an inventor on the '426, 386 and '135 Patents, has known about articles and patents

published before the filing dates of the '426, '386 and '135 Patents that discuss this concept. Smith has known about these other articles because he has cited them in his own publications and in other patents that he has obtained.

196. The '426 and '386 Patents claim 1-2 and 1-3 dihedral angle errors that "vary in opposition". Nonetheless, Inventor Smith withheld the reference entitled: "Study of Light Deviations in Triple Mirrors and Tetrahedral Prisms," J. Optical Society of Am. Vol. 48 No. 7, July 1959 pp. 496-499 ("Yoder") from the patent office.

197. Smith knew about Yoder because he cited it in an article he wrote about measuring dihedral angle errors. He also cited it in another patent in which he was named an inventor, U.S. Patent No. 5,706,132.

198. Yoder is material because a reasonable examiner would have considered it important to know that others had discussed varying dihedral angles in opposition and explained exactly how such variance would spread light. This would have rebutted arguments that the inventor made claiming varying dihedral angles in opposition was novel.

199. More particularly, during the prosecution of the '426 Patent, Smith argued that the examiner was not correct in stating that selecting values for the 1-2 and 1-3 dihedral angle errors was nothing more than routine in the art. The Yoder article would have refuted that argument by showing that those of skill in the art had been provided with equations to calculate how particular dihedral angle errors would spread the light.

200. Claim 8 of the '135 Patent also claims varying dihedral 1-2 and 1-3 angles in opposition. In addition to not disclosing the Yoder article which would have been

relevant and material to claim 8 for the same reasons discussed above, Inventor Smith did not disclose U.S. Patent No. 4,775,219 to Appledorn and U.S. Patent No. 5,138,488 to Szczech.

201. Each of these patents was material to the prosecution of the '135 Patent because each discusses numerous ways of varying the dihedral angle errors in opposition and explains how this will affect the spread of light and the observation angle. Given claim 8 being directed to dihedral 1-2 and 1-3 angles varying opposition, a reasonable examiner would have wanted to know that others had varied the angles in that way.

The '132 patent

202. The '132 Patent has claims directed to retroreflective sheeting with multiple zones. Within each of those zones, in for example claim 1 of the '132 Patent, the cube corner elements are oriented differently such that they provide different planes of retroreflective performance.

203. An earlier 3M foreign filing, WO 96/42023, named two of the inventors of the '132 Patent, Kenneth Smith and Gerald Benson.

204. In the 42023 foreign application, Smith and Benson acknowledged that they were aware of prior art to a company named Stimsonite that had sold retroreflective sheeting that had multiple zones with cube corner elements oriented differently within those zones to provide different planes of retroreflective performance. This prior art is identified at p. 22 and Fig. 14 of the 42023 PCT application.

205. Despite knowing of the Stimsonite prior art, neither Smith, Benson nor anyone else substantially involved in the prosecution of the '132 application cited the Stimsonite prior art during the prosecution of the '132 application.

206. A reasonable examiner would have considered the Stimsonite art relevant and material to the prosecution of the '132 application because it disclosed zones of cube corners wherein the cube corners within the zones were oriented differently to have different planes of retroreflective performance. In fact, the Stimsonite prior art was used to reject claims in the foreign counterpart to the '132 Patent. This patent was only reinstated on appeal after amendments were entered to distinguish over the Stimsonite prior art.

207. On information and belief, the references described above in Paragraphs 195-206 were withheld with a specific intent to deceive the United States Patent and Trademark Office.

FOURTH AFFIRMATIVE DEFENSE: PROSECUTION HISTORY ESTOPPEL

208. The relief sought by Plaintiffs is barred in whole or in part under the doctrine of prosecution history estoppel.

FIFTH AFFIRMATIVE DEFENSE: WAIVER, EQUITABLE ESTOPPEL AND/OR MISUSE

209. The relief sought by Plaintiffs is barred in whole or in part under one or more of the doctrines of waiver, estoppel and/or misuse.

SIXTH AFFIRMATIVE DEFENSE: LACK OF DAMAGES

210. The damages sought by Plaintiffs are barred in whole or in part because of Plaintiffs' or its licensees' failure to comply with 35 U.S.C. § 287(a).

SEVENTH AFFIRMATIVE DEFENSE: DOUBLE PATENTING

211. The relief sought by Plaintiffs is barred in whole or in part under the doctrine of double patenting.

NINTH AFFIRMATIVE DEFENSE: LICENSE

212. The relief sought by Plaintiffs is barred in whole or in part because Avery's actions are licensed.

RIGHT TO AMEND DEFENSES

Avery reserves the right to amend its answer to assert further defenses based on future discovery during the lawsuit.

COUNTERCLAIMS

Pursuant to Rule 13 of the Federal Rules of Civil Procedure, Defendant Avery Dennison Corporation (“Defendant” or “Avery”) for its counterclaims against 3M Innovative Properties Company and 3M Company (collectively “Plaintiffs” or “3M”), allege as follows:

PARTIES

1. Avery is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business located at 150 North Orange Grove Boulevard, Pasadena, California 91103.

2. Upon information and belief, plaintiff 3M Company is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business located at 3M Center, St. Paul, Minnesota 55133.

3. Upon information and belief, plaintiff 3M Innovative Properties Company is a wholly-owned subsidiary of 3M Company with its principal place of business at 3M Center, St. Paul, Minnesota 55133.

JURISDICTION AND VENUE

4. This is an action for declaratory judgment of non-infringement, invalidity, and unenforceability of United States Patent No. 5,706,132, No. 5,936,770, No. 6,884,371, No. 7,188,960, No. 7,261,426, No. 7,329,012, No. 7,458,694, No. 7,556,386, No. 6,318,987, No. 6,257,860, No. 6,386,855, No. 7,309,135, and No. 7,152,983 (hereinafter collectively “the Asserted 3M Patents”) arising under the patent laws of the United States, 35 U.S.C. § 1 et seq, and the Declaratory Judgment Act, 28 U.S.C. §§ 2201-2202. Therefore, this court has subject matter jurisdiction over Avery’s Counterclaims pursuant to 28 U.S.C. §§ 1331, 1338(a), 2201, and 2202.

5. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(b) and 1391(c). Plaintiffs have consented to jurisdiction in this district by filing suit against Avery in this court.

GENERAL ALLEGATIONS

6. The '132 Patent was issued by the United States Patent and Trademark Office on January 6, 1998. The 770 Patent was issued by the United States Patent and Trademark Office on August 10, 1999. The '371 Patent was issued by the United States

Patent and Trademark Office on April 26, 2005. The '960 Patent was issued by the United States Patent and Trademark Office on March 13, 2007. The '426 Patent was issued by the United States Patent and Trademark Office on August 28, 2007. The '012 Patent was issued by the United States Patent and Trademark Office on February 12, 2008. The '694 Patent was issued by the United States Patent and Trademark Office on December 2, 2008. The '386 Patent was issued by the United States Patent and Trademark Office on July 7, 2009. The '987 Patent was issued by the United States Patent and Trademark Office on November 20, 2001. The '860 Patent was issued by the United States Patent and Trademark Office on July 10, 2001. The '855 Patent was issued by the United States Patent and Trademark Office on May 14, 2002. The '135 Patent was issued by the United States Patent and Trademark Office on December 18, 2007. The '983 Patent was issued by the United States Patent and Trademark Office on December 26, 2006. Plaintiffs claim to be the owners, by assignment, of all right, title and interest in the Asserted 3M Patents.

7. On June 25, 2010, Plaintiffs filed suit against Avery claiming infringement of the Asserted 3M Patents by Avery.

8. An actual controversy exists between Avery and Plaintiffs regarding the infringement, validity and enforceability of the Asserted 3M Patents.

FIRST CAUSE OF ACTION: DECLARATORY JUDGMENT OF NON-INFRINGEMENT

9. Avery incorporates the allegations in paragraphs 1 through 211 of the answer and defenses herein and paragraphs 1 through 8 of these counterclaims as if fully set herein.

10. Avery has not infringed and is not infringing any of the Asserted 3M Patents.

11. Avery is entitled to a declaratory judgment of non-infringement of the Asserted 3M Patents.

SECOND CAUSE OF ACTION: DECLARATORY JUDGMENT OF INVALIDITY

12. Avery incorporates the allegations in paragraphs 1 through 211 of the answer and defenses herein and paragraphs 1 through 11 of these counterclaims as if fully set herein.

13. The Asserted 3M Patents are invalid and for failure to satisfy one or more of the conditions of patentability set forth in Title 35 of the United States Code, including, but not limited to, 35 U.S.C. §§ 101, 102, 103 and 112.

14. Avery is entitled to a declaratory judgment of invalidity.

THIRD CAUSE OF ACTION: DECLARATORY JUDGMENT OF UNENFORCEABILITY

15. Avery incorporates the allegations in paragraphs 1 through 211 of the answer and defenses herein and paragraphs 1 through 14 of these counterclaims as if fully set herein.

16. The '426, '386, '135, and '132 Patents are unenforceable as a result of 3M's inequitable conduct.

'426, '386 and '135 Patents

17. 3M and/or its agents who were materially involved in the prosecution of patents failed to fulfill the duty of candor owed to the patent office during the prosecution of the '426, '386 and '135 patents-in-suit.

18. The '426, '386 and '135 Patents that 3M has asserted against Avery contain claims that are directed to varying dihedral 1-2 and 1-3 angles in opposition to one another. Kenneth Smith claims to have invented this concept. Yet Smith, who is named as an inventor on the '426, 386 and '135 Patents, has known about articles and patents published before the filing dates of the '426, '386 and '135 Patents that discuss this concept. Smith has known about these other articles because he has cited them in his own publications and in other patents that he has obtained.

19. The '426 and '386 Patents claim 1-2 and 1-3 dihedral angle errors that "vary in opposition". Nonetheless, Inventor Smith withheld the reference entitled: "Study of Light Deviations in Triple Mirrors and Tetrahedral Prisms," J. Optical Society of Am. Vol. 48 No. 7, July 1959 pp. 496-499 ("Yoder") from the patent office.

20. Smith knew about Yoder because he cited it in an article he wrote about measuring dihedral angle errors. He also cited it another patent in which he was named an inventor, U.S. Patent No. 5,706,132.

21. Yoder is material because a reasonable examiner would have considered it important to know that others had discussed varying dihedral angles in opposition and

explained exactly how such variance would spread light. This would have rebutted arguments that the inventor made claiming varying dihedral angles in opposition was novel.

22. More particularly, during the prosecution of the '426 Patent, Smith argued that the examiner was not correct in stating that selecting values for the 1-2 and 1-3 dihedral angle errors was nothing more than routine in the art. The Yoder article would have refuted that argument by showing that those of skill in the art had been provided with equations to calculate how particular dihedral angle errors would spread the light.

23. Claim 8 of the '135 Patent also claims varying dihedral 1-2 and 1-3 angles in opposition. In addition to not disclosing the Yoder article which would have been relevant and material to claim 8 for the same reasons discussed above, Inventor Smith did not disclose U.S. Patent No. 4,775,219 to Appledorn and U.S. Patent No. 5,138,488 to Szczech.

24. Each of these patents was material to the prosecution of the '135 Patent because each discusses numerous ways of varying the dihedral angle errors in opposition and explains how this will affect the spread of light and the observation angle. Given claim 8 being directed to dihedral 1-2 and 1-3 angles varying opposition, a reasonable examiner would have wanted to know that others had varied the angles in that way.

The '132 patent

25. The '132 Patent has claims directed to retroreflective sheeting with multiple zones. Within each of those zones, in for example claim 1 of the '132 Patent, the cube

corner elements are oriented differently such that they provide different planes of retroreflective performance.

26. An earlier 3M foreign filing, WO 96/42023, named two of the inventors of the '132 Patent, Kenneth Smith and Gerald Benson.

27. In the 42023 foreign application, Smith and Benson acknowledged that they were aware of prior art to a company named Stimsonite that had sold retroreflective sheeting that had multiple zones with cube corner elements oriented differently within those zones to provide different planes of retroreflective performance. This prior art is identified at p. 22 and Fig. 14 of the 42023 PCT application.

28. Despite knowing of the Stimsonite prior art, neither Smith, Benson nor anyone else substantially involved in the prosecution of the '132 application cited the Stimsonite prior art during the prosecution of the '132 application.

29. A reasonable examiner would have considered the Stimsonite art relevant and material to the prosecution of the '132 application because it disclosed zones of cube corners wherein the cube corners within the zones were oriented differently to have different planes of retroreflective performance. In fact, the Stimsonite prior art was used to reject claims in the foreign counterpart to the '132 Patent. This patent was only reinstated on appeal after amendments were entered to distinguish over the Stimsonite prior art.

30. On information and belief, the references described above in Paragraphs 18-29 were withheld with a specific intent to deceive the United States Patent and Trademark Office.

31. Avery is entitled to a declaratory judgment of unenforceability of the '426, '386, '135, and '132 Patents.

32. Avery reserves the right to amend its inequitable conduct pleading to conform to further information uncovered as a result of discovery.

EXCEPTIONAL CASE

33. Upon information and belief, this is an exceptional case entitling Avery to an award of their attorneys' fees incurred in connection with defending and prosecuting this action pursuant to 35 U.S.C. § 285, as a result of, inter alia, initiating this lawsuit claiming infringement by Avery of the Asserted 3M Patents with the knowledge that Avery does not infringe the Asserted 3M Patents and/or that the Asserted 3M Patents are invalid and/or unenforceable.

RELIEF REQUESTED

WHEREFORE, Avery respectfully requests the following relief:

1. A judgment in favor of Avery denying all relief requested by Plaintiffs in this action and dismissing Plaintiffs' Amended Complaint for patent infringement with prejudice;

2. A judgment declaring that Avery has not infringed and is not infringing any valid and/or enforceable claim of the Asserted 3M Patents, and that Avery has not contributed to or induced and is not contributing to or inducing infringement of any valid and enforceable claim of the Asserted 3M Patents;

3. A judgment declaring that each claim of the Asserted 3M Patents is invalid.

4. A judgment declaring that the '426, '386, '135 and '132 patents and their progeny are unenforceable because of inequitable conduct;
5. A judgment declaring this to be an exceptional case under U.S.C. § 285 and awarding Avery its costs, expenses, and reasonable attorneys' fees;
6. That the court award Avery such other and further relief as the court deems just and proper.

DEMAND FOR JURY TRIAL

In accordance with Fed. R. Civ. P. 38(b), Avery demands a trial by jury on all issues so triable.

DATED: September 20, 2010

By: s/ Kurt J. Niederluecke

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